**Injury to the Spine**

Injury to the spine is among the top 10 running injuries.[1](https://www.sports-health.com/sports-injuries/running-injuries/common-running-injuries-back-pain#vh_footnotes) Both the spine's vertebrae and intervertebral discs experience extra pressure each time a runner's foot impacts ground. This pounding can exacerbate an existing or developing back problem.

Examples of these problems include herniated discs, degenerative disc disease, and vertebral stress fractures.

**Herniated disc**  
The vertebral discs act as shock absorbers between the spine's vertebrae. When a vertebral disc is squeezed out of its normal space it is called a herniated, bulging or ruptured disc. If a herniated disc pushes against a nearby nerve root or against the spinal cord it can cause significant pain. The most common area for herniated discs is the low back, particularly between the L4-5 vertebrae.

**Degenerated disc**  
Disc degeneration disease is not actually a disease but the gradual breakdown of one or more intervertebral discs. Over time, a disc's firm outer layer undergoes wear-and-tear and can weaken. Additionally, a disc's gelatinous core can lose water content, so the disc is flatter, offers less cushion, and is less flexible. Disc degeneration begins as early as childhood, and by age 60 most people will have some degree of disc degeneration, though not everyone will experience pain.

**Vertebral fracture (Compression fracture)**  
Typically, healthy vertebrae only break after a serious physical trauma, such as a severe car accident. However, a vertebra that is weakened by osteoporosis, prolonged corticosteroid therapy, infection, ankylosing spondylitis, or certain other diseases can experience a stress fracture. Pain may develop gradually and be more noticeable when standing up. Treatment usually does not require surgery.

Among runners, women with a lower than average body-mass index are at the highest risk for spinal injury.

How much pain a person experiences depends on the nature of the back injury and the individual runner. A person who consistently gets nagging lower back pain after runs or has pain that radiates to the buttocks or legs should seek a medical evaluation.

Generally, running injuries should be treated early on. Runners who try to "run through the pain" may cause their injuries to get worse.